

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/822,979	03/30/2001	Abner Lerner	0325.00363 8947		
21363	7590 03/07/2006	. EXAMINER			
CHRISTOPHER P. MAIORANA, P.C. 24840 HARPER SUITE 100			LY, ANH VU H		
	HORES, MI 48080		ART UNIT	PAPER NUMBER	
			2667		
			DATE MAILED: 03/07/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application N	D. [Applicant(s)				
Office Action Summary		09/822,979		LERNER, ABNER				
		Examiner		Art Unit				
		Anh-Vu H. Ly		2667				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
 Responsive to communication(s) filed on <u>18 November 2005</u>. This action is FINAL. This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213. 								
Disposition of Claims								
 4) Claim(s) 1,3-13 and 15-21 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1,3-13 and 15-21 is/are rejected. 7) Claim(s) 12,13,15 and 16 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 								
Application Papers								
9)☐ The specification is obje 10)☑ The drawing(s) filed on a Applicant may not request Replacement drawing she 11)☐ The oath or declaration	30 March 2001 is/are: that any objection to the et(s) including the correct	a) accepted of a accepted of drawing(s) be he tion is required if	ld in abeyance. See the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1				
Priority under 35 U.S.C. § 119								
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
Attachment(s) 1) Notice of References Cited (PTO-8 2) Notice of Draftsperson's Patent Dra 3) Information Disclosure Statement(s Paper No(s)/Mail Date	wing Review (PTO-948)		Interview Summary Paper No(s)/Mail Da Notice of Informal Pa Other:		52)			

Application/Control Number: 09/822,979 Page 2

Art Unit: 2667

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. As stated in page 1, lines 12-15 of the specification that Fig. 1 illustrates a conventional approach for implementing a communication protocol using a channel for the transmission of electrical signals. Herein, the implemented protocol is well known before applicant's invention. Therefore, Fig. 1 should be labeled as "Prior Art". See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 12-13 and 15-16 are objected to because of the following informalities:

With respect to claim 12, in line 2, "a local events" should be changed to --a local event--.

With respect to claim 13, in line 3, "a local events" should be changed to --a local event--and in lines 10-11, "said shared communication channel" lacks antecedent basis.

With respect to claim 15, in line 3, containing additional step (C), however, step (C) is already cited in independent claim 13.

With respect to claim 16, in lines 2-3, "said one or more local events" lacks antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 3. Claims 1, 3-7, 11-13, 15-18, and 20-21 are rejected under 35 U.S.C. 102(a) as being anticipated by the admitted prior art as disclosed in the specification on pages 1-2 and Fig. 1. Hereinafter, referred to as APA.

With respect to claims 1, 12, and 13, APA discloses an apparatus (Fig. 1) comprising: one or more stations each configured to (i) receive local events from a local input (page 1, line 20 – page 2, line 3 and Fig. 1, each one of the stations 12a-12n has an input 18a-18n that receives a local event signal LOCALa-LOCALn) and (ii) present broadcast timing information over a shared communication channel (page 2, lines 3-6, the stations 12a-12n present a signal on the first and second communication channels 14 and 16 in response to the local events LOCALa-LOCALn. Herein, either channel 14 or 16 is a shared communication channel and being used by all stations 12a-12n);

wherein said one or more stations are each configured to (i) present said broadcast timing information comprising (a) a first synchronous local event (page 2, lines 10-12, the

communication channel 14 performs a wired-NOR function, thereby carrying information about the detection of the first event) and (b) a last synchronous local event (page 2, lines 12-14, the second communication channel 16 performs a wired-AND function, thus carrying information about the detection of the last event)

and (ii) share the broadcast timing information with each of said other stations over said shared communication channel (Fig. 1, channels 14 and 16 carrying broadcast timing information. Herein, either channel 14 or 16 is a shared communication channel and being used by all stations 12a-12n).

With respect to claim 3, APA discloses that the apparatus comprising a communication protocol (page 1, lines 12-13 and Fig. 1, a circuit implementing a communication protocol).

With respect to claim 4, APA discloses that wherein said timing information is configured to distinguish between the first local event and the last local event from the stations (page 2, lines 6-9, one of the communication channels 14 or 16 contains information about a first local event detected and the other one contains information about a last local event detected).

With respect to claims 5 and 15, APA discloses that wherein each of said one or more stations is further configured to receive one or more local events (Fig. 1, stations 12a-12n receive one or more local events LOCALa-LOCALn).

Art Unit: 2667

With respect to claim 6, APA discloses that wherein each of one or more stations comprising a receive module configured to receive said broadcast timing information; and a transmit module coupled to said communication channel (page 1, lines 16-18, a station is defined as an entity capable of transmitting and receiving information, detecting an external event and acting upon the event).

With respect to claim 7, APA discloses that wherein each of said one or more transmit modules is configured to present said broadcast timing information (page 2, lines 3-6, the stations 12a-12n present a signal on the first and second communication channels 14 and 16 in response to the local events LOCALa-LOCALn).

With respect to claim 11, APA discloses that wherein each of one or more stations each further comprising a plurality of buffers (Fig. 1 discloses a conventional communication protocol for the broadcast of the first and the last event detection. Herein, the stations 12a-n must have buffers or queues to store information for transmissions).

With respect to claim 16, APA discloses that wherein step B is further configured in response to one or more local events (page 2, lines 3-6, the stations 12a-12n present a signal on the first and second communication channels 14 and 16 in response to the local events LOCALa-LOCALn).

With respect to claim 17, APA discloses receiving and transmitting broadcast timing information (Fig. 1, stations 12a-12n receive local events at input ports and broadcast events over channels 14 or 16).

With respect to claim 18, APA discloses sharing event detection information within a time window (page 1, lines 17-18 discloses that the station detects and acts upon the event.

Herein the acting step is taken right away within a time period).

With respect to claim 20, APA discloses determining a first and last local event (page 2, lines 10-14, the communication channel 14 performs a wired-NOR function, thereby carrying information about the detection of the first event and the second communication channel 16 performs a wired-AND function, thus carrying information about the detection of the last event).

With respect to claim 21, APA discloses a plurality of transceiver circuits configured to receive and transmit said broadcast timing information from said communication channel to said stations through one or more serial links (page 2, lines 16-18 and Fig. 1, stations receive and transmit broadcast timing information over channels 14 or 16).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject

matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA in view of Elberbaum (US Patent No. 6,493,034 B1).

With respect to claims 8-10, APA discloses a conventional communication protocol for broadcasting first and last local events (Fig. 1). APA does not disclose that wherein each of one more stations comprises one or more delay circuits comprising a receive time delay circuit or a transmit time delay circuit. Elberbaum discloses a transmit time delay circuit 70 (Fig. 4, element 70) and a receive time delay circuit (Fig. 2, element 23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include delay components in APA's system, as suggested by Elberbaum, to synchronize data transmissions.

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over APA.

With respect to claim 19, APA discloses a conventional communication protocol for broadcasting first and last local events (Fig. 1). APA does not disclose acknowledging event detection information. However, acknowledgment (ACK) technique is well known in the art for confirming the transmitted data. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include ACK mode in APA's system, to increase system reliability.

Application/Control Number: 09/822,979 Page 8

Art Unit: 2667

Withdrawal of Finality

6. The finality of the Office Action dated August 16, 2005 has been withdrawn. However, this Office Action is made final since claims had been amended in accordance to the amendment filed June 03, 2005 and applicant's arguments are not persuasive.

Response to Arguments

7. Applicant's arguments filed June 03, 2005 have been fully considered but they are not persuasive.

Applicant argues in page 9 that the background section is concerned with a protocol device for the broadcast of event information over two channels. The first channel communicates information about the first local event and the second channel communicates information about the second local event. Examiner respectfully agrees. However, as illustrated in Fig. 1, either channel 14 or channel 16 is a shared communication channel which being used by a plurality of stations 12a-12n for broadcasting detected events. Therefore, the background section reads on the claimed invention since, as recited in lines 6-10 "broadcast timing information ... share said broadcast timing information with each of said other stations over said shared communication channel" of independent claim 1. Unless, claim 1 recites that a single shared communication channel being used for broadcasting both the first and last synchronous local events. Otherwise, the background section reads on the claimed limitations as stated above.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl

CHI PHAM
PERVISORY PATENT EXAMINATE SELECTION OF COMMENTS OF COMME